PRODUCTION OF ALUMINUM ALLOY CASTING

Publication number: JP8246118 (A)
Publication date: 1996-09-24
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Applicant(s): UBE INDUSTRIES
Classification:
- International: ***C22F1/043; C22C21/02; C22F1/00;*** **C22F1/043; C22C21/02; C22F1/00;** (IPC1-7): C22F1/043; C22C21/02
- European:
Application number: JP19950043735 19950303
Priority number(s): JP19950043735 19950303

Abstract of **JP 8246118 (A)**

PURPOSE: To produce a uniform and excellent Al alloy casting improved in mechanical properties by subjecting an Al alloy casting with aging properties to solution treatment, thereafter subjecting it to plastic working at a specified working ratio and successively subjecting the same to artificial aging treatment. CONSTITUTION: An Al alloy casting with aging properties constituted of an Al-Si-Mg alloy contg., by weight, 4 to 13% Si and 0.1 to 0.7% Mg is subjected to solution treatment to form a supersaturated solid solution. Next, this Al alloy is subjected plastic working such as upset forging at 2 to 10% working rate. After that, this worked Al alloy casting is subjected to artificial aging treatment at a suitable temp. to precipitate intermetallic compounds or the like from the same solid solution, and hardening is executed.

HIGH TOUGHNESS AND HIGH STRENGTH ALUMINUM ALLOY CASTING

Publication number: JP6065666 (A)
Publication date: 1994-03-08
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Applicant(s): HITACHI METALS LTD
Classification:
- International: *C22C21/02; C22F1/00; C22F1/043;* C22C21/02; C22F1/00; C22F1/043; (IPC1-7): C22C21/02; C22F1/043
- European:
Application number: JP19920247297 19920824
Priority number(s): JP19920247297 19920824

Abstract of **JP 6065666 (A)**

PURPOSE:To obtain an aluminum alloy casting little in the deterioration of the m echanical property and particularly excellent in toughness even in the condition that the cooling rate of thic k part is slow as an automobile parts s uch as alum inum wheel, suspension device parts. CO NSTITUTION:This high toughness and high strength alum inum alloy casting having >=20m m thickness in a part thereof consists, by weight, 4-8% Si, 0.2-0.6% Mg <=0.1% Fe, <=0.4% Mn and the balance Al w ith inevitable impurities is specified as 1.0-4.2 Si (%)XMg (%), and applied with T6 treatment after casting. The Al alloy casting is specified as 0.1-1.0% casting defect ratio in a part of the struct ure and >=1100 the value of a strength i ndex of he mechanical property in this part [3 X tensile strength (N/mm<2>) + 40 X elongation (%)].